

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. This submission is identical to the unentered amendments accompanying the "First Reply to Office Action" mailed by the Applicant on March 20, 2006.

1. (Currently Amended) A fluid cooled brake housing for a brake system that includes a rotatable element to be braked, the brake housing comprising: including at least:

a casing having a circumferential wall and two axial end walls that define ~~defining~~ a sealed cavity for housing one or more friction pads of the brake system, said casing having one or more walls, at least one of said one or more walls provided with an internal fluid flow path; a fluid inlet in fluid communication with said a fluid flow path that is internal to the circumferential wall, and a fluid outlet in fluid communication with said fluid flow path;

an opening in the casing through which a portion of the rotatable element can extend;

a seal means for sealing the opening such that the casing can be at least partially filled with a volume of lubricating fluid to provide a wet brake housing; and

whereby, when a fluid supply of cooling fluid is coupled with said fluid inlet, cooling fluid supply flows through circumferential wall at least one of said one or more walls via the said fluid inlet, the fluid flow path and the fluid outlet, thereby cooling said housing.

~~wherein, a volume of fluid is sealed within said cavity and at least partially covering said braking surface said fluid separate from cooling fluid.~~

2. (Original) The housing according to claim 1, wherein said fluid flow path includes at least one channel between said fluid inlet and said fluid outlet.

3. (Original) The housing according to claim 1, wherein said fluid flow path includes a plurality of parallel connected channels extending between said fluid inlet and said fluid outlet.
4. (Withdrawn) The housing according to claim 1 further including sealing means for sealing said sealed cavity when said housing is mounted on an axle to provide a wet brake housing.
5. (Withdrawn) A wall for a wet brake housing, said wall including an internal fluid flow path, a fluid inlet in fluid communication with said fluid flow path, and a fluid outlet in fluid communication with said fluid flow path;

whereby, when a fluid supply is coupled with said fluid inlet, fluid flows through said wall via said inlet, through said fluid flow path and out said fluid outlet to cool said wall.

6. (Withdrawn) The wall according to claim 5, wherein said fluid flow path includes at least one channel between said fluid inlet and said fluid outlet.
7. (Withdrawn) The wall according to claim 5, wherein said fluid flow path includes a plurality of parallel connected channels extending between said fluid inlet and said fluid outlet.

8. (Currently Amended) The A fluid cooled brake housing system including of claim 1 further comprising:

a fluid cool brake housing having a casing defining a sealed cavity, said casing having one or more walls, at least one of said one or more walls provided with an internal fluid flow path, and a fluid inlet and a fluid outlet each in fluid communication with said fluid flow path;

one or more brake pads disposed in said sealed cavity;

braking surface located within said sealed cavity;

an actuator for selectively moving said one or more brake pads into contact with said braking surface; and,

a supply of cooling fluid external of said sealed cavity and in fluid communication with said fluid inlet and said fluid outlet, whereby said cooling fluid circulates through said supply, said fluid inlet, fluid flow path and fluid outlet.

9. (Original) The brake system according to claim 8 further including a pump for pumping said cooling fluid through said supply and said fluid flow path.
10. (Original) The brake system according to claim 9 further including a heat exchanger in fluid communication with said supply for cooling said cooling fluid.
11. (Currently Amended) The brake system according to claim 8 further including a volume of lubricating fluid sealed within said sealed cavity and at least partially covering said braking surface, said lubricating fluid separate from said cooling fluid.

12. (Previously Presented) The brake system according to claim 8 wherein said fluid flow path includes at least one channel between said fluid inlet and said fluid outlet.
13. (Previously Presented) The brake system according to claim 8 wherein said fluid flow path includes a plurality of parallel connected channels extending between said fluid inlet and said fluid outlet.
14. (Currently Amended) The brake system according to claim 8 further including sealing means for sealing said sealed cavity when said housing is mounted on an axle to provide a wet brake housing.